AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of producing a three-dimensional structure, comprising the steps of:

providing a needle-shaped nozzle body having a fine inside diameter at a tip thereof, the nozzle supplied with a fluid;

arranging ~~a substrate close to~~ a tip of the nozzle to be close to a substrate;

ejecting a fluid droplet having an ultra-fine diameter from the tip of the nozzle toward a surface of the substrate by applying a voltage having a prescribed waveform to the needle-shaped nozzle body via the electrode so as to make the droplet fly and land on the substrate, and thereby the droplet being dried ~~during flight~~ to be a solidified substance ~~at~~ after landing on the substrate; and

continually ejecting subsequent droplets by applying the prescribed waveform voltage to the nozzle for the droplets being stacked on said solidified substance so as to form a grown three-dimensional ~~structure.~~structure,

wherein the nozzle inside diameter is 0.01 μm to 8μm.

2. (Canceled)

3. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein an electric line of force is attracted to the top of the solidified substance of the droplet, and wherein the three-dimensional structure is grown by stacking the subsequent flying droplet guided along the electric line of force onto the top of the solidified substance.

4. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein a cross-sectional diameter of the three-dimensional structure is controlled by a volatile property of the droplet ejected from the needle-shaped fluid- ejection body.

5. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein a temperature of the substrate is controlled in that the previously landed droplet on the substrate is volatilized to be hard enough for the subsequent droplet stacked thereon.

6. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein a surface temperature of the substrate is controlled by at least one heating means selected from the group consisting of a Peltier element, an electric heater, an infrared heater, a heater using fluid such as an oil heater, a silicon rubber heater, and a thermistor, that is fixed to the substrate or a substrate supporting body.

7. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein a surface temperature of the substrate is controlled in a range of from room temperature to 100°C.

8. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein the fluid is a solution containing metal particulates.

9. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein the fluid is a polymer solution.

10. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein the fluid is a solution containing ultra-fine ceramic particles.

11. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein the fluid is a sol-gel solution of ceramics.

12. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein the fluid is a low molecular weight compound solution.

13. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein the fluid is a fluid containing at least one solution selected from the group consisting of a solution containing metal particulates, a polymer solution, a solution containing ultra-fine ceramic particles, a sol-gel solution of ceramics, and a low-molecular weight compound solution.

14. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein a diameter of the ejected droplet is 15 μm or less.

15. (Original) The method of producing a three-dimensional structure according to claim 14, wherein a diameter of the droplet is 5 μm or less.

16. (Original) The method of producing a three-dimensional structure according to claim 14, wherein a diameter of the droplet is 3 μm or less.

17. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein a time required for the droplet to be dried and solidified is 2 seconds or less.

18. (Original) The method of producing a three-dimensional structure according to claim 17, wherein the time required for the droplet to be dried and solidified is 1 second or less.

19. (Original) The method of producing a three-dimensional structure according to claim 17, wherein the time required for the droplet to be dried and solidified is 0.1 second or less.

20. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein a flying speed of the droplet is 4 m/sec or more.

21. (Original) The method of producing a three-dimensional structure according to claim 20, wherein the flying speed is 6 m/sec or more.

22. (Original) The method of producing a three-dimensional structure according to claim 20, wherein the flying speed is 10 m/sec or more.

23. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein the steps are conducted in an atmosphere having a vapor pressure of the fluid lower than a saturated vapor pressure of the fluid.

24. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein a dielectric constant of the fluid to be ejected is 1 or more.

25 - 34. (Canceled)

35. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, wherein the needle-shaped nozzle is a micro-capillary tube.

36. (Previously Presented) The method of producing a three-dimensional structure according to claim 1, further comprising an electrode within the nozzle.